

What is claimed is:

- 1 1. An apparatus comprising:
2 a fuel cell;
3 an integrated circuit; and
4 a cooling system to cool the fuel cell and the integrated circuit;
5 wherein the cooling system includes a fluid medium to remove heat from the
6 fuel cell and the integrated circuit.
- 1 2. The apparatus of claim 1 wherein the fuel cell includes at least one electrode
2 through which the fluid medium passes.
- 1 3. The apparatus of claim 1 further comprising a pump to pump the fluid
2 medium.
- 1 4. The apparatus of claim 1 further comprising at least one temperature sensor.
- 1 5. The apparatus of claim 4 wherein the temperature sensor is configured to
2 sense a temperature of the fuel cell.
- 1 6. The apparatus of claim 4 wherein the temperature sensor is configured to
2 sense a temperature of the integrated circuit.
- 1 7. The apparatus of claim 4 further comprising a control system adapted to
2 modify a fluid flow in response to a temperature sensed by the temperature sensor.
- 1 8. The apparatus of claim 4 further comprising a control system adapted to
2 modify a power output level of the fuel cell in response to a temperature sensed by
3 the temperature sensor.

- 1 9. The apparatus of claim 1 wherein the integrated circuit comprises a
2 processor.
- 1 10. The apparatus of claim 1 further comprising a plurality of heat generating
2 devices coupled to the cooling system.
- 1 11. The apparatus of claim 1 wherein the fluid medium comprises a liquid metal.
- 1 12. The apparatus of claim 1 wherein the cooling system is adapted to have the
2 fluid medium transition through a phase change.
- 1 13. An apparatus comprising:
2 a fuel cell having an electrode with passageways through which a fluid
3 cooling medium can pass; and
4 a fluid path adapted to be coupled to the passageways and to a heat
5 generating device other than the fuel cell.
- 1 14. The apparatus of claim 13 further comprising a pump coupled to the
2 electrode, the pump configured to pump the fluid cooling medium through the
3 passageways.
- 1 15. The apparatus of claim 13 further comprising an integrated circuit coupled to
2 the fluid path.
- 1 16. The apparatus of claim 15 wherein the integrated circuit comprises a
2 graphics circuit.
- 1 17. The apparatus of claim 15 wherein the integrated circuit comprises a
2 processor.

- 1 18. The apparatus of claim 13 further comprising a temperature sensor.
- 1 19. The apparatus of claim 18 further comprising a control system to increase
2 the fuel cell output when a temperature sensed by the temperature sensor drops.
- 1 20. A method comprising:
2 sensing a temperature within a cooling system adapted to cool a fuel cell and
3 a device at least partially powered by the fuel cell; and
4 modifying a fluid flow of the cooling system.
- 1 21. The method of claim 20 wherein sensing a temperature comprises sensing a
2 temperature of the fuel cell.
- 1 22. The method of claim 20 wherein sensing a temperature comprises sensing a
2 temperature of the at least one other device.
- 1 23. A method comprising:
2 sensing a temperature within a cooling system adapted to cool a fuel cell and
3 at least one other device; and
4 modifying a power output of the fuel cell.
- 1 24. The method of claim 23 wherein sensing a temperature comprises sensing a
2 temperature of the fuel cell.
- 1 25. The method of claim 23 wherein sensing a temperature comprises sensing a
2 temperature of the at least one other device.
- 1 26. The method of claim 25 wherein modifying a power output comprises
2 increase the power output when the temperature drops.

1 27. An apparatus including a medium adapted to hold machine-accessible
2 instructions that when accessed result in a machine performing:
3 sensing a temperature within a cooling system adapted to cool a fuel cell and
4 at least one other device; and
5 modifying a power output of the fuel cell.

1 28. The apparatus of claim 27 wherein sensing a temperature comprises sensing
2 a temperature of the at least one other device.

1 29. The apparatus of claim 28 wherein modifying a power output comprises
2 increase the power output when the temperature drops.

1 30. An electronic system comprising:
2 a fuel cell;
3 an integrated circuit;
4 a cooling system to cool the fuel cell and the integrated circuit, wherein the
5 cooling system includes a fluid medium to remove heat from the fuel cell and the
6 integrated circuit; and
7 an antenna coupled to the integrated circuit.

1 31. The electronic system of claim 30 wherein the electronic system comprises a
2 computer.

1 32. The electronic system of claim 31 wherein the fuel cell is external to the
2 computer.

1 33. The electronic system of claim 31 wherein the fuel cell is in a swappable bay
2 of the computer.

1 34. The electronic system of claim 31 wherein the fuel cell is semi-permanently
2 affixed within the computer.